

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claim 1. (Currently amended)

An apparatus for extracting representative still images from Moving Picture Experts Group (MPEG) video, comprising:

**a user requirement input unit for inputting a number n from the user to divide the video curve into n segments, where n is a positive integer;**

a video curve generation unit for calculating **maximum** distances between adjacent frames of all ~~intra frames~~ **I-frames'** **cumulative DC histogram values** of input video and generating a video curve that is a cumulative curve of the **maximum** distances;

a video curve division unit for dividing the video curve into ~~a certain number of segments~~ **the n segments using nth-order approximation line and nth-order approximation tangent point;**

a still image selection unit for selecting video images corresponding to ~~certain points~~ **the nth-order approximation tangent points** of the divided video curve as representative still images; ~~and~~ **, where the nth-order approximation tangent points are the points on the video curve which have the maximum distances between themselves and the nth-order approximation line; and**

a video output unit for outputting the still images selected by the still image generation unit.

Claim 2. (Canceled)

Claim 3. (Currently amended)

The apparatus according to claim 1, wherein the video curve generation unit comprises:

an intra frame selection unit for selecting an intra frame from the input video;

at least one ~~Y-picture~~ Luminance selection unit for selecting only Direct Current (DC) coefficients from Discrete Cosine Transform (DCT) coefficients of a ~~Y-picture~~ Luminance value(Y) on the selected intra frame;

at least one cumulative DC histogram generation unit for extracting a cumulative histogram of the DC coefficients;

at least one frame distance generation unit for calculating a maximum distance between cumulative histograms of adjacent intra frames and determining the maximum distance to be a distance between two adjacent frames; and

a cumulative frame distance histogram generation unit for acquiring the video curve, that is, a cumulative curve, from the distance between the adjacent frames of the selected intra frames when the distance between the adjacent frames is calculated through the ~~Y-picture~~ Luminance selection unit, the cumulative DC histogram generation unit and the frame distance generation unit.

Claim 4. (Currently amended)

A method of extracting representative still images from MPEG video, comprising the steps of:

~~generating a video curve, that is, a cumulative curve of distances between adjacent frames of all frames of input video, by calculating the distances between the frames;~~

getting a number  $n$  ( $n$  is a positive integer) from user or system to choose the number of still images;

calculating maximum distances between adjacent frames of all I-frames' cumulative DC histogram values of input video;

generating a video curve that is a cumulative curve of the maximum distances;

dividing the video curve into a certain number of segments the  $n$  segments using  $n$ th-order approximation line and  $n$ th-order approximation tangent point;

selecting video images corresponding to certain points the  $n$ th-order approximation tangent points of the divided video curve as representative still images, where the  $n$ th-order approximation tangent points are the points on the video curve which have the maximum distances between themselves and the  $n$ th-order approximation line; and

outputting all or some of the selected still images.  
a video output unit for outputting the still images selected by the still image generation unit.

Claim 5. (Currently amended)

The method according to claim 4, wherein the said step of generating the video curve comprises the steps of:

selecting an intra frame of the input video;

selecting only DC coefficients from DCT coefficients of a  $\forall$  picture Luminance value(Y) on the selected intra frame;

extracting a cumulative histogram of the DC coefficients;

calculating a maximum distance between cumulative histograms of adjacent intra frames and determining the maximum distance to be a distance between two neighboring frames; and

acquiring the video curve, that is, a cumulative curve of distances between neighboring frames of all selected intra frames, by calculating the distances between the adjacent frames.